

CLARIFICATION OF THE MONOTYPIC GENERA
CHIRISCUS AND *SYMMIUS*
(CRUSTACEA: ISOPODA: IDOTEIDAE)

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Abstract.—*Chiriscus australis* Richardson, 1911, has been re-examined and placed in the older genus *Macrochiridothea* Ohlin of which *Chiriscus* becomes a junior synonym. *Symmium caudatus* Richardson, 1904, is redescribed. Both *Symmium* and *Macrochiridothea* are diagnosed and a list of non-idoteine genera of the Idoteidae is given.

In the early part of this century Harriet Richardson described two monotypic genera in the isopod family Idoteidae: *Symmium* (1904) and *Chiriscus* (1911). As part of an examination of non-idoteine genera present in southern Australia it was thought desirable to re-examine the type and only species of the two genera in order to establish their continued validity.

Brusca (1984) has revised in detail the genera of the Idoteinae. The remaining genera of the family, a group which Brusca referred to as the "glyptonotine-group," are listed in Table 1. They comprise four subfamilies the relationships of which are far from clear and receive more attention by Poore (in press).

Richardson's description of *Chiriscus australis* was in part incorrect. It may now be safely placed in the older genus *Macrochiridothea* Ohlin, 1901. The genus *Chiriscus* becomes a junior synonym of the larger genus for which an amended generic diagnosis is given.

Symmium caudatus clearly does not belong to any other genus and is here redescribed in more detail and the genus diagnosed. Richardson's (1904) description contained numerous errors and omissions.

Family Idoteidae
Macrochiridothea Ohlin

Macrochiridothea Ohlin, 1901:286.—Nordenstam, 1933:105.—Sheppard, 1957: 168-173.—Menzies, 1962:98.—Hurley & Murray, 1968:244.—Moreira, 1973: 12.—Jones & Fenwick, 1978:619.

Chiriscus Richardson, 1911:169-170.—Sheppard, 1957:168-169.

Diagnosis.—Head immersed partly in pereonite 1, laterally expanded, margins incised or entire. Eyes dorsal if present. Pereonites 5-7 only with coxal plates distinct dorsally. Pereonite 7 much narrower than pereonite 6. Pleonites 1-3 completely free; pleonite 1 much narrower than following pleonites; no partial sutures on the remaining pleotelson. Pereopod 1 subchelate, propodus grossly expanded. Pereopods 2 and 3 subchelate; elongate-ovate propodus cupped by triangular or lobed fifth article; dactyl well developed, minute or absent. Pereopods 4-7 ambulatory, pereopod 6 the longest; all pereopods with dactyl, usually minute.

Table 1.—Non-idoteine genera of the Idoteidae (see Brusca, 1984, for genera of Idoteinae and Poore, in press, for one additional genus).

<i>Austridotea</i> Nicholls, 1937
<i>Austrochaetilia</i> Poore, 1978
<i>Chaetilia</i> Dana, 1853
<i>Chiridotea</i> Harger, 1878
<i>Chiriscus</i> Richardson, 1911 (junior synonym of <i>Macrochiridothea</i>)
<i>Glyptonotus</i> Eights, 1852
<i>Macrochiridothea</i> Ohlin, 1901
<i>Maoridotea</i> Jones & Fenwick, 1978
<i>Mesidotea</i> Richardson, 1905 (junior synonym of <i>Saduria</i>)
<i>Notidotea</i> Nicholls, 1937 (may be a synonym of <i>Euidotea</i> (Idoteinae)—Hurley, 1961)
<i>Parachiridotea</i> Daguerre de Hureaux & Elkaim, 1972
<i>Proidotea</i> Racovitza & Sevastos, 1910 (Oligocene fossil)
<i>Saduria</i> Adams, 1852
<i>Saduriella</i> Holthuis, 1964
<i>Symmium</i> Richardson, 1904

Mandible with toothed incisor, large lacinia mobilis and substantial setal row, molar absent (except for single seta). Maxillipedal palp of 4 articles, about 3 times as long as endite, penultimate article proximally broad. Pereopods and antennae ornamented with numerous clubbed setae. Uropods overlapping in midline, enclosing pleopods except anteriorly; rami unequal.

Remarks.—This diagnosis modifies those of Menzies (1962) and Moreira (1973) to include *Macrochiridothea australis* which differs from species previously known in two respects. Pereopods 2 and 3 of *M. australis* do not possess dactyls although in all other respects they are similar. The state in *M. australis* is the final step in a trend shown in the genus toward loss of dactyls; in at least two species the dactyls are minute (Moreira 1973). Only *M. australis* lacks a lateral incision on head. The incision ranges from well developed (e.g., *M. stebbingi*) to only slight (*M. robusta*) (Moreira 1973). In all other respects Richardson's species conforms with *Macrochiridothea* which must therefore be broadened to include it.

The figures of *M. australis* enable it to be distinguished from other species in the genus. Moreira (1973), Hurley & Murray (1968), and Bastida & Torti (1969) have figured several species in more detail. This enables an assessment of the mouthparts and pleopods, which may all be important in generic relationships within the family.

Macrochiridothea australis (Richardson), new combination

Figs. 1a, 2

Chiriscus australis Richardson, 1911:170–171, figs. 1–5.

Diagnosis.—Body smooth except for broad dorsolateral bosses on pereonites 1–4. Body 2.3× as long as wide. Head laterally expanded but without lateral incisions. Eyes present, minute. Antenna 2, peduncle article 4 lobed to shield article 5. Pereopods 2 and 3 without dactyls, article 5 strongly lobed. Pereopods 4 and 7 each with an extremely minute dactyl.

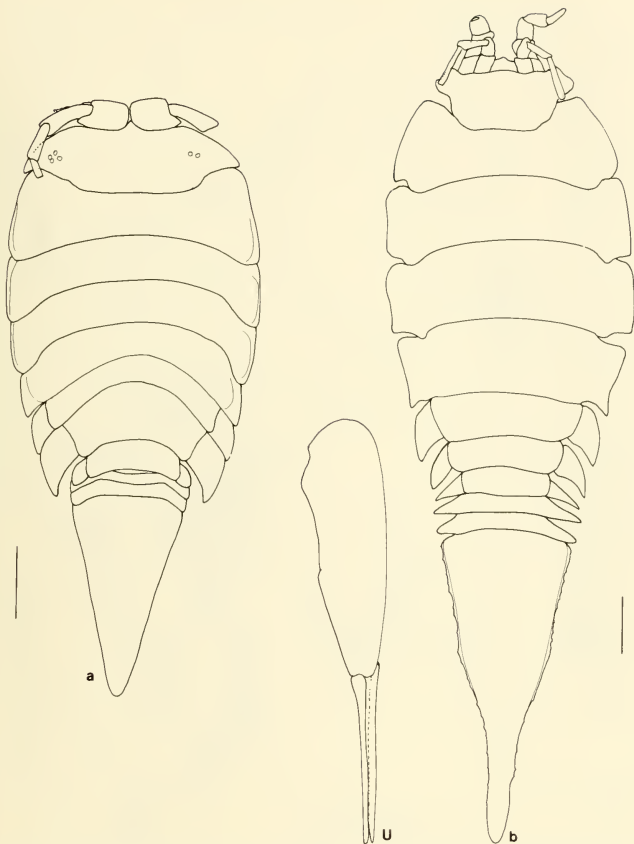


Fig. 1. a, *Macrochiridothea australis*, holotype; b, *Symmius caudatus*, ♀ syntype; u, uropod of *S. caudatus* (scales 1 mm).

Material.—Holotype, USNM 42092, ovigerous ♀, 7.9 mm; Argentina, off Rio de la Plata, 21 m, 12 Jan 1888 (U.S. Fisheries Commission Steamer *Albatross* station 2764).

Remarks.—Only the holotype, an adult female, is known. The diagnosis given enables the species to be distinguished from the eight listed by Moreira (1973).

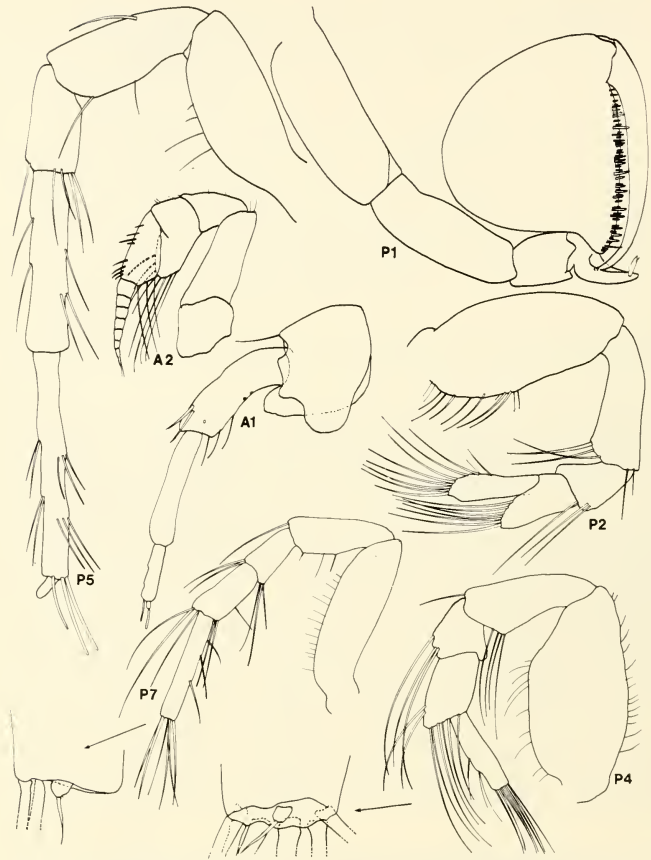


Fig. 2. *Macrochiridothea australis*, holotype: P1, P2, P4, P5, P7, pereopods 1, 2, 4, 5 and 7; A1, A2, antennae 1 and 2.

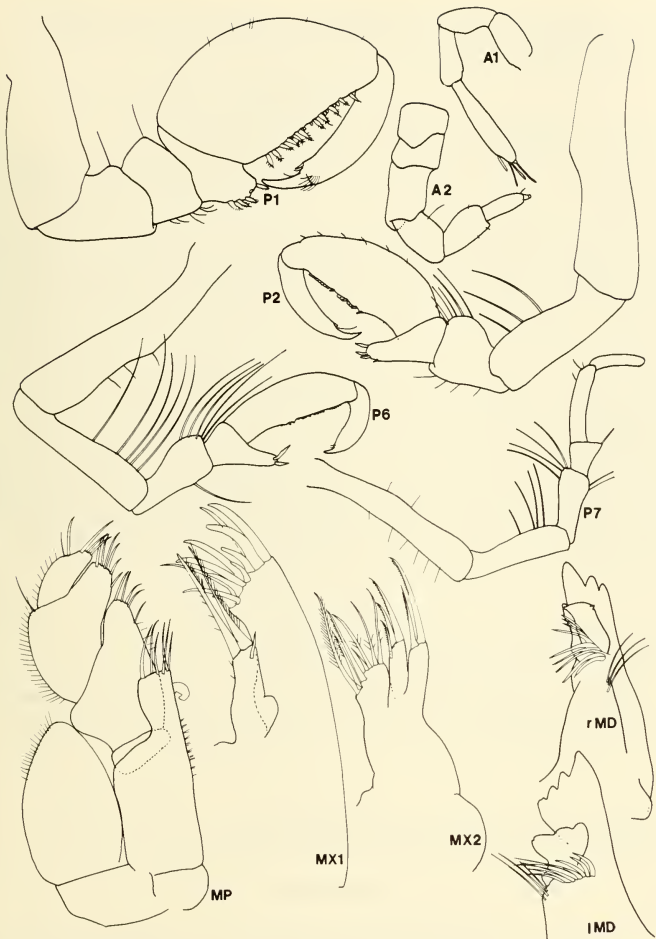


Fig. 3. *Symmius caudatus* ♀ syntype: P1, P2, P6, P7, pereopods 1, 2, 6 and 7; A1, A2, antennae 1 and 2; MD, mandibles (left & right); MX1, MX2, maxillae 1 and 2; MP, maxilliped.

Macrochiridothea australis is most similar to *M. lilianae* in body shape and form of the pereopods.

Symmium Richardson

Symmium Richardson, 1904:39–40.—Nordenstam, 1933:103.

Diagnosis.—Head partly immersed in pereonite 1, laterally expanded slightly, margins entire. Eyes dorsal. Pereonites 5–7 only with coxal plates distinct dorsally. Pereonite 7 little narrower than pereonite 6. Pleonites 1 and 2 completely free, of similar width and laterally acute; no partial sutures on the remaining pleotelson. Pereopods 1–6 prehensile; propodus of pereopod 1 swollen, those of pereopods 2–6 cylindrical, decreasing in size posteriorly and cupped by a triangular lobed fifth article. Pereopod 7 ambulatory, of similar size to pereopod 6; dactyl without an unguis. Mandible with toothed incisor, large lacinia mobilis and substantial setal row, molar absent (except for 3 distal long setae). Maxillipedal palp of 4 articles, about 3 times as long as endite, articles 2 and 3 mesially lobed. Pereopods and antennae ornamented with simple or plumose setae. Uropods overlapping in midline, enclosing pleopods except anteriorly; rami equal and narrow.

Remarks.—The format of this and the previous diagnosis enables the genus to be distinguished from others in the non-idoteine group (Poore, in press). Richardson (1904) did not illustrate the mouthparts of *S. caudatus* which are shown here in some detail. The relationships of *Symmium* to other non-idoteines are not clear. The genus is unique in that pereonite 7 reaches full width of the body, in having only two free pleonites, and in possessing six pairs of prehensile limbs.

Symmium caudatus Richardson

Figs. 1b, 3

Symmium caudatus Richardson, 1904:40–41, figs. 11–15.

Diagnosis.—As given for genus.

Material.—3 syntypes (of 9 reported by Richardson): USNM 29081; ovigerous ♀, 12.6 mm; juveniles, 8.8 mm and 12.2 mm. Oxe Zaki, Japan, 109–127 m (U.S. Fisheries Commission Steamer *Albatross* station 3715).

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